

**Before the
Federal Communications Commission**

In the Matter of)	
)	
Review of the Commission's Rules Regarding)	WC Docket No. 03-173
the Pricing of Unbundled Network Elements)	Filed: December 16, 2003
and the Resale of Service by Incumbent Local)	
Exchange Carriers)	

**Declaration of
Joseph Gillan
On Behalf of
The CompTel/Ascent Alliance
and the
PACE Coalition**

Introduction

1. My name is Joseph Gillan and my business address is PO Box 541038, Orlando, Florida, 32854.
2. I have over 20 years experience providing economic analysis concerning issues in the telecommunications industry. I hold B.A. and M.A. degrees in economics from the University of Wyoming. From 1980 to 1985, I served on the staff of the Illinois Commerce Commission where he advised the Commission on issues related to the emergence of competition in regulated markets, in particular the telecommunications industry. While at the Illinois Commission, I served on the staff subcommittee for the NARUC Communications Committee and was appointed to the Research Advisory Council overseeing the National Regulatory Research Institute. In 1985, I joined U.S. Switch, a venture firm organized to develop interexchange access networks in partnership with independent local telephone companies where I was named Vice President-Marketing/Strategic Planning. I currently serve on the Advisory Council to New Mexico State University's Center for Regulation.
3. I have been asked by the CompTel/Ascent Alliance and the PACE Coalition to address a number of threshold economic issues raised by the Notice of Proposed Rulemaking issued by the Federal Communications Commission ("FCC" or "Commission") concerning possible changes to the Commission's pricing rules applicable to unbundled network elements ("UNEs").¹ Specifically, I address (1) the

¹ Notice of Proposed Rulemaking, WC Docket No. 03-173, Adopted September 10, 2003, Released September 15, 2003 ("TELRIC NPRM").

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FCC's proposal to depart from long-run costing principles by adopting a short-run "planning horizon" approach,² as well as (2) the potential effect of those aspects of the Triennial Review Order ("TRO")³ that has reshaped the incumbent's unbundling obligations and given rise to "partially unbundled" facilities and/or the relegation of competitive access to legacy facilities that the incumbent may no longer support through future investment.

4. As I explain below, the Commission should continue to adopt UNE pricing rules that conform to core economic principles. To the extent that the Commission considers adopting a limited "planning horizon" approach, then such changes should be made consistent the estimation of short-run economic costs. This would require that whatever plant is not open to optimization should not be included in the cost calculation. In essence, if the Commission intends to rely on the principles of economic efficiency to develop its pricing rules, then optimization is the predicate for an investment's inclusion in a cost analysis and UNE price.

5. The long-run horizon for the Commission's existing TELRIC rules assures that all costs are considered in developing UNE prices. It is this feature of its rules that provides the incumbent with full cost recovery (albeit on a forward looking basis), and which provides entrants with appropriate incentive to replace ILEC facilities with competitive facilities where it makes economic sense to do so. As general matter, I would recommend that the Commission retain a long-run, forward-looking focus for its UNE pricing, as appropriately reflected in its TELRIC rules.

6. There are circumstances, however, in which the Commission should consider adopting a short-run approach. These occur where the TRO provides the entrant access to legacy network facilities, but then eliminates that access as the facilities are replaced with new technology. Because the TRO legally imposes a short-run horizon on CLEC access, it may be appropriate to establish UNE prices for the legacy facilities based on a short-run view.⁴ As such, the UNE price for such legacy facilities would be based on the forward-looking variable costs that would be incurred to operate and maintain these facilities, but would not include costs associated with facilities-replacement.

7. Finally, where the TRO provides only "partial" access to a facility (such as, only providing access to a 64kb channel on a broadband facility), the TELRIC cost of that

² TELRIC NPRM, ¶ 54.

³ Report and Order on Remand and Further Notice of Proposed Rulemaking, CC Docket No. 01-338, Adopted February 20, 2003, Released August 21, 2003 ("Triennial Review Order" or "TRO").

⁴ I note later in the affidavit, however, that where an ILEC volunteers to provide continuing access, then it should be permitted to establish prices using the long-run TELRIC methodology.

facility should be allocated between UNE and non-UNE applications in proportion to the relative bandwidth of each application.

Costing Principles

8. Economics tells us that prices matter. In an economy that operates through the interaction of decisions made by individual consumers and producers, price is the principal mechanism by which resources are directed to their most productive use.

9. The fundamental economic property of a cost-based price is that the price reflect the economic cost that *will be* incurred as a consequence of the decision to purchase and “consume” a product. With the exception of Merlin (who legend has it lived his life backwards, with the ability to remember the future), the only decisions that can be changed – and, therefore, the only costs that can be influenced – are those costs that have yet to be incurred. It is from this basic observation that the concept of forward-looking costs is born – the only relevant cost is a cost that is “in-play,” which means that it must be a cost that may yet be varied.

10. It is quite obvious that some decisions take longer to effect than others. For instance, it takes longer to build a new factory than to adjust the output of a factory that is already operating. In recognition of these differences, economics refers to different time horizons as the “short-run” and the “long-run.” A short-run perspective holds fixed some elements of production (for instance, in the example above, the size of a factory), while allowing other elements to vary (for instance, the number of workers or shifts).

11. In contrast, to fully consider within an economic cost analysis the costs of facilities that take time to modify, economists have developed the construct of the “long-run.” The signature feature of a “long-run” perspective is that it assumes that all assets are variable. By embracing such a perspective, – that is, the assets are treated as decisions that have not yet been made, but over time will be made – so that the cost of all plant may be incorporated into the analysis.

12. The long-run perspective is critically useful to cost analysis in the telecommunications industry. Only by adopting a long-run analysis is it possible to account for the costs of network facilities that cannot be adjusted quickly. Telecommunication facilities in general, and outside plant in particular, cannot be adjusted rapidly. In order to reasonably model all relevant costs, it is appropriate to adopt a long-run costing approach (as is generally done with the Commission’s TELRIC rules).

13. The economic rationale for the inclusion of (otherwise) fixed network costs into a cost analysis is that the plant is treated as variable and, therefore, subject to modification. If these assets are to be treated as variable, however, it is axiomatic that they must be assumed to be varied in an efficient, least-cost fashion. Any other choice would sanction the waste of productive resources.

14. The NPRM seeks comment on a third-approach to costing that would hold fixed some facilities, while incorporating planned changes over a relatively short (three to five) year planning horizon.⁵ Although lacking in detail, the alternative approach referenced by the NPRM suggests that the cost of those facilities that have not been treated as variable by the analysis would also be included. Specifically, the NPRM states:

Although this approach would take as given whatever existing facilities will remain in the network at the end of the designated period, it also should capture technological evolution within that period.⁶

15. The cost of the “existing facilities [that] will remain in the network” relevant for economic pricing purposes would be the forward-looking cost of those facilities. As explained above, in order for these facilities to have an associated forward-looking cost, however, they must be viewed as variable and optimized using the best available current technology.⁷ The Commission cannot simultaneously hold the facilities constant and include their cost in an economically sound way.⁸

16. The Commission's existing rules appropriately link the time horizon used for the economic analysis (a period in which all facilities may be varied) with the corresponding requirement that the cost of network facilities should reflect the best available technology and current prices. The Commission should not adopt the suggested alternative approach that would only consider some portions of the network as variable, while (presumably) still including the cost of facilities that are fixed.

17. Notably, the NPRM does not explain how the cost of “non-varying” plant would be calculated. In order to apply the current price of the best available technology, the plant would have to be engineered according to the design parameters of that technology. Certainly, the historic embedded cost of that plant would not be relevant to an economic model and, in any event, may not be determinable in a verifiable way. Consequently, in addition to being incorrect, the approach would likely require greater resources and be more controversial than the Commission's existing rules that are systematically consistent.

⁵ TELRIC NPRM, ¶ 54.

⁶ *Ibid.*

⁷ For this reason, it matters little whether the horizon is the strict short-run, or some slightly longer period of time such as 3 to 5 years. Because portions of local telecommunications networks can provide efficient service for 30 to 50 years or more, any horizon less than the complete “long-run” suffers from the same deficiencies as short-run horizons.

⁸ Perhaps less critically, it is not correct that the proposal would “capture technological evolution” within that period. The purpose of economic modeling is not to estimate how technology will evolve in the future; as the Commission's existing TELRIC rules reflect, the appropriate approach considers only the best technology that is currently available.

Specific Issues Raised by the Triennial Review Order

18. The Commission's TELRIC rules are reasonably straightforward in an environment where the incumbent's unbundling obligation is applied to defined facilities, and its unbundling obligation was independent of the technology that it had deployed. The TRO, however, creates two circumstances where this framework may no longer apply.

19. First, under the TRO, some facilities may be "partially unbundled," with a portion of the capacity subject to unbundling, while other portions are not. Second, the TRO creates the potential for the ILEC to deploy a parallel non-UNE network, relegating competitors to legacy facilities that will atrophy over time. The relevant question is how should the Commission's pricing rules be adjusted to address such circumstances.

20. As to the first consequence of the TRO – i.e., the situation in which a particular facility is only being partially unbundled – the TELRIC of the facility must be fairly apportioned between its UNE and non-UNE capacity. On balance, an appropriate allocation would be that the UNE-capacity – e.g., a 64kb channel on a hybrid loop -- should receive no more than a relative (by bandwidth) assignment of cost. The primary purpose of an investment in expanded bandwidth is so that the incumbent may offer broadband services. There is no justification for assigning to the residual UNE capacity any greater than a proportional allocation of the cost.

21. As to situations where the incumbent chooses to deploy a parallel network to take advantage of the Commission's policy relieving it of its unbundling obligation, the Commission must now address the pricing implications of that decision. The Commission's decision to selectively base the ILEC's unbundling obligation on the technology it has deployed complicates the process of determining the appropriate economic price for facilities that the ILEC may be strategically abandoning for non-economic purposes.

22. An important function of an economically efficient price is to signal to potential purchasers the value of the resources that would be directed into the production of the service or to build the necessary facility. In a normal setting, this would mean that the price of a particular facility should reflect (at any point in time) the cost to reproduce the facility (or its capability) using the best available technology at that time.

23. The Commission's policy choice to modify the ILEC's unbundling regime (due to the perceived need to increase the incumbent's incentive to introduce new technologies) fundamentally alters the value of the ILEC's embedded resources. Because of the Commission's policy decision, the resource-consequences of a CLEC's UNE purchase is no longer linked to a subsequent investment action by the incumbent because the ILEC no longer will replace these resources. With no resource commitment hanging in the balance, it would be inappropriate to develop UNE prices as though use of legacy facilities by the CLEC would lead to replacement investment in the future.

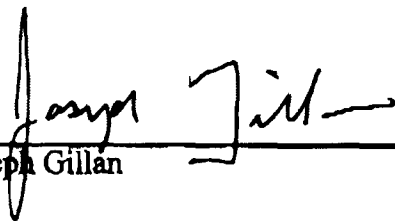
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24. The Commission's policy (if adopted by the ILEC) discourages the efficient evolution of the network through the introduction of new technology, while potentially encouraging the deployment of parallel facilities. It is not my purpose here to discuss the merit of this approach, but rather to address its pricing implication. To the extent that an ILEC chooses to allow its existing network to atrophy, the appropriate price for facilities should be based on the short-run costs that remain relevant (namely costs associated with operations and maintenance).

25. The ILEC should, of course, retain the opportunity to charge full TELRIC based rates, but only if it commits to grant access to new facilities. The embedded cost of legacy network that the incumbent, through its own (presumably profit-maximizing) actions, chooses to strand is a cost that only the incumbent should bear as a result of that choice.

26. In summary, the Commission's TELRIC rules are economically sound. It would be unwise to impose additional artificial constraints, such as an arbitrary planning horizon approach, that would foreclose the calculation of efficient forward-looking costs on a long-run basis. To the extent that the TRO creates facilities that are only "partially unbundled," the UNE-prices should never include more than a proportional assignment of TELRIC costs (based on relative capacity). Finally, to the extent that an ILEC chooses to relegate CLEC access to legacy facilities that will atrophy over time, UNE rates should be based on the short-run costs associated with the maintenance of those facilities.

This concludes my declaration.



Joseph Gillan